

Mr. Griff Miller U.S. EPA Region III , 1650 Arch Street, Philadelphia PA 19103

Hello Mr. Miller:

Environmental Review, Inc. has reviewed the document, we have the following comments:

1. Page 2 – The statement, “primarily bounded by undeveloped land, with some farmland and sporadic residential development primarily to the north.” is insufficient; there is a private residence approximately 100 meters to the west and an additional residence 50 meters further to the west, from the edge of the main plant facility. Another residence is located directly to the north-west of the facility. Have these residents been notified of the cleanup actions and this public comment period? Is the perimeter of this site adequately fenced and posted as containing substances that represent a threat to human health and the environment (please ensure adequate measures are taken)?
2. Page 4 – The description of petroleum separate-phase liquid (SPL) hydrocarbons floating on shallow groundwater and the recovery of over 200,000 gallons of that material with a remediation system makes it abundantly clear that this site represents a major source of contamination in this region which is adjacent to creeks and ecological habitats. At page 15 the “Remediating the Source of Releases” section states that the source has been removed however the evaluation identifies that there is still a significant source present (e.g at page 5 the thickness of the SPL is described as “less than 2 feet”. Although an estimate of the percentage petroleum recovered at the site was not presented, if we assume 90% was recovered, we could expect another 20,000 gallons could be recovered using alternative technologies. For example, proven technologies like dual phase extraction with bioslurping from a well network on a grid array could prove effective for further reduction of toxicity, mobility, or volume of the hazardous constituents (balancing criteria #5 shown on p. 15). Therefore, the information included in the Statement of Basis that the source material has been removed is misleading. The evaluation appears to have overlooked that site conceptual models also identify secondary sources as sources which appear to be significant here.
3. Page 4 – A more technical discussion that contamination will not extend below 125 feet below the ground surface at the site should be presented. The technical details regarding any aquiclude and citations of specific studies are needed. This document has a very obvious deficiency: since groundwater contamination to the 125' depth has been documented, there is a need for groundwater monitoring in that deep zone. Although surface waters may be protected by the bank stabilization with sheet piling and clay materials, that construction does not seal off the lower aquifer zone. Therefore, continual monitoring of both the vertical and lateral extent of migration of contaminants in the aquifer zones below the sheet piling depth is needed. Monitoring of groundwater gradient is also needed in order to confirm that there is not a reversal or variation in the groundwater flow direction (e.g. this might occur if groundwater pumping occurred nearby). If that occurred the containment system would no longer be effective so this type of long-term monitoring is essential.
4. Page 5 – The Institutional Controls describe restrictions on future land usages, groundwater usage, and construction of buildings due to vapor intrusion concerns. However, the land use

covenant which was included in the packet showed that an environmental manager for Honeywell signed the document. That type of document usually needs a corporate executive signatory.

5. Page 5– The statement that, “Groundwater fate and transport modeling predict that groundwater contamination is unlikely to migrate in shallow groundwater in the direction of Potato Creek (to the east) and the eastern portion of Cole Creek.” appears to need considerable supporting documentation. A specific modeling evaluation should be cited along with a listing of the exact modeling programs which were utilized. In addition, since a sheet piling containment barrier has been constructed along the creek bank, some type of description of the altered groundwater flow pattern around this site should be presented (e.g. groundwater gradient maps showing altered groundwater flows). Since more than one type of modeling applies here, each model should be described and the respective findings should be presented (e.g. groundwater flow model and natural attenuation models like BIOSCREEN).

6. Page 5–The statement that, “The yearlong monitoring-only period concluded in June 2015, and all monitoring criteria were met except for the sheen occurrence described above on the north bank of Cole Creek (sheen has never entered the active flowing water of Cole Creek since shutdown of the SPL recovery system, but has been contained by the creek bank and the oily water separator pipe wall).” is insufficient since the monitoring period was too short and the monitoring criteria seems subjective. Additional discussion should be presented including the results of historical surface water and sediment sampling.

7. Pages 5, 12 – The Main Plant Area toward the Former Crude Tanks Area and toward Cole Creek appears to need additional characterization and remediation measures.

8. Add greater detail to descriptions of the historical data of surface water testing and describe the planned surface water testing programs.

9. Pages 5, 12 – Add descriptions of historical stream sediment sampling. Has the distribution of contaminants in the stream sediments been characterized? Has a baseline contaminant level for stream sediments been established? Have sediment pore waters along the stream bank been tested? Has sediment transport been considered as part of a fate and transport model for the site?

10. Page 10 – The discussion of Technical Impracticability is illogical and deficient. The statement that “final remedies to return usable groundwater to its maximum beneficial use within a timeframe that is reasonable given the site-specific conditions” suggests that it may be reasonable to expect that site cleanup will take centuries? Usually recovery of petroleum SPL is conducted to the “maximum extent practicable”. That standard should be applied to this site. If it was, tens of thousands of gallons of petroleum may be recovered (as discussed in comment #2 above). In addition, monitored natural attenuation (MNA) should be conducted at this site to gain an understanding of how to optimize mitigation of the contaminants. For example, the industry standard for MNA of petroleum hydrocarbons includes testing for dissolved oxygen, oxidation-reduction potential, nitrate-nitrite, sulfate-sulfide, total organic carbon, methane, dissolved iron and manganese. Since cost is a factor for determining Technical Impracticability, the costs of various approaches should be presented

11. Page 12 – The discussion in the section on groundwater monitoring, stated as “at a minimum requires surface water monitoring” is inadequate. Groundwater monitoring should be required to support conclusions related to migration of groundwater. A full network of groundwater monitoring wells should be required and the testing program should have been included in this document. Additionally, checking for hydrocarbon sheen along the creek – as appears to be the plan here – is inadequate.

12. Page 17 – Financial Assurance was proposed to be not required on the basis that annual expenses would be less \$50,000 per year. Since financial assurance calculations normally cover a 30-year term, at that rate, \$1,500,000 would be considered a fairly standard level of financial assurance needed and should be required here.

Due to these deficiencies in the proposed remedy *Resource Conservation and Recovery Act (RCRA) Corrective Action Statement of Basis* and for Honeywell Farmers Valley Wax Plant (International Waxes) in Smethport, Pennsylvania - EPA ID: PAD046761763, I (Nathan Clohecy) hereby request that a public hearing be held.

When responses to these comments are available, please send them to me via email at [environmentaleng@consultant.com](mailto:environmentaleng@consultant.com).

Regards, Nathan Clohecy-Project Manager, Environmental Review, Inc., 1792 Rogers Ave, San Jose, CA 95112 [www.envreview.org](http://www.envreview.org)

PS: Please, **send a confirmation email ASAP**; specifically, confirming that these comments were received by the intended recipient ([miller.griff@epa.gov](mailto:miller.griff@epa.gov) - Mr. Griff Miller U.S. EPA Region III, 1650 Arch Street, Philadelphia PA 19103).